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| APPLICATION NO        | ).      | FILING DATE      | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------|---------|------------------|-------------------------|---------------------|------------------|
| 10/750,651 12/31/2003 |         | 12/31/2003       | Chang Hyun Kim          | 11037-172-999       | 1626             |
| 24341                 | 7590    | 03/31/2005       |                         | EXAMINER            |                  |
| MORGA                 | N, LEWI | S & BOCKIUS, LLI | NORMAN, MARC E          |                     |                  |
| 2 PALO A<br>3000 EL C |         |                  | ART UNIT                | PAPER NUMBER        |                  |
| PALO ALTO, CA 94306   |         |                  |                         | 3744                |                  |
|                       |         |                  | DATE MAILED: 03/31/2005 |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

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| 01 |  |

Applicant(s)

|  | 10/750,651  | KIM, CHANG HYUN            |             |  |  |  |  |  |
|--|---|----------------------------|-------------|--|--|--|--|--|
| Office Action Summary  | Examiner  | Art Unit                   |             |  |  |  |  |  |
|  | Marc E. Norman  | 3744                       |             |  |  |  |  |  |
|  | The MAILING DATE of this communication appears on the cover sheet with the correspondence address |                            |             |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                            |             |  |  |  |  |  |
| Status   |   |                            |             |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 31 De   | ecember 2003.   |                            |             |  |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This   | action is non-final.  |                            |             |  |  |  |  |  |
| 3) Since this application is in condition for allowan  | ce except for formal matters, pro   | secution as to the         | e merits is |  |  |  |  |  |
| closed in accordance with the practice under E   | x parte Quayle, 1935 C.D. 11, 45  | 3 O.G. 213.                | ,           |  |  |  |  |  |
| Disposition of Claims  |   |                            |             |  |  |  |  |  |
|  |   |                            |             |  |  |  |  |  |
| 4) Claim(s) 1-21 is/are pending in the application.  |   |                            |             |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |                            |             |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  |   |                            |             |  |  |  |  |  |
| 6) Claim(s) <u>1-4,15 and 21</u> is/are rejected.  |   |                            |             |  |  |  |  |  |
| 7) Claim(s) <u>5-14 and 16-20</u> is/are objected to.  |   |                            |             |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | election requirement.   |                            |             |  |  |  |  |  |
| Application Papers   |   |                            |             |  |  |  |  |  |
| 9) The specification is objected to by the Examiner.   |   |                            |             |  |  |  |  |  |
| 10)⊠ The drawing(s) filed on 31 December 2003 is/ar  | re: a)⊠ accepted or b)⊡ objecto   | ed to by the Exam          | niner.      |  |  |  |  |  |
| Applicant may not request that any objection to the  | drawing(s) be held in abeyance. See   | e 37 CFR 1.85(a).          |             |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |                            |             |  |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |                            |             |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |                            |             |  |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |   |                            |             |  |  |  |  |  |
| a) All b) Some * c) None of:   |   |                            |             |  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |   |                            |             |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |                            |             |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |                            |             |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |   |                            |             |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |                            |             |  |  |  |  |  |
|  |   |                            |             |  |  |  |  |  |
| Attachment(s)  |   |                            |             |  |  |  |  |  |
| Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)   |   |                            |             |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 12/31/03.   | Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:   | ite atent Application (PT0 | O-152)      |  |  |  |  |  |
|  |   |                            |             |  |  |  |  |  |

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### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 15, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et al. (U.S. Patent 5,133,302).

As per claims 1 and 21, Yamada et al. discloses:

A method/apparatus for controlling a cooling fan unit of a vehicle, the cooling fan unit including at least one cooling fan 112, the method/apparatus comprising:

detecting a plurality of vehicle parameters including a coolant temperature (sensor 2) and a vehicle speed (sensor 1);

determining a driving load of the cooling fan unit corresponding to the vehicle parameters on the basis of a plurality of temperature ranges of the coolant temperature and a plurality of speed ranges of the vehicle speed (ranges as shown in Figures 3A, 3B, and 4), the driving load being selectively determined from a plurality of predetermined loads (low S7 or high S8); and

operating the cooling fan unit at the determined driving load (Figure 3A).

As per claim 2, Yamada et al. discloses a reference temperature (e.g., 95°C in step S2; 105°C in step S6) and reference speed (e.g., 20km/h in step S1).

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As per claim 3, Yamada et al. discloses coolant reference temperature at step S6 being chosen based on A/C switch decision of S3 (Figure 3A).

As per claim 4, Yamada et al. further teaches pressure switch setting of step S4 determining if temperature reference of step S6 is chosen (Figure 3A).

As per claim 15, the speeds and temperatures are based on a system having an air conditioning system.

## Allowable Subject Matter

Claims 5-14 and 16-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc E. Norman whose telephone number is 571-272-4812. The examiner can normally be reached on Mon.-Fri., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Esquivel can be reached on 571-272-4808. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MN

MARC NORMAN PRIMARY EXAMINER